

Amendments to the Specification

Please replace the Title on page 1 with the following amended title:

METHODS, ~~INTERFACE UNIT AND NODES~~ NODE FOR USING IN
~~PARALLEL~~ A COMMUNICATION NETWORK IN PARALLEL FOR REAL-TIME
APPLICATIONS AND NON-REAL-TIME APPLICATIONS

Please add the following new paragraph after the title on page 1:

This application is the national phase under 35 U.S.C. § 371 of PCT International Application No. PCT/EP2003/011705, which has an international filing date of October 22, 2003 and which designated the United States of America.

Please add the following new paragraph after the second paragraph on page 3:

WO 00/03521 discloses a real-time implementation in an Ethernet, in which the controller ensures that real-time data is transmitted before non-real-time data. SHARROCK, S.M. ET AL.: "A CSMA/CD-BASED, INTEGRATED VOICE/DATA PROTOCOL WITH DYNAMIC CHANNEL ALLOCATION," COMPUTER NETWORKS AND ISDN SYSTEMS, NORTH HOLLAND PUBLISHING, AMSTERDAM, NL, Vol. 18, No. 1, November 24, 1998, pp. 1-18, describes a transmission method in which voice data and normal data are separated in an Ethernet application. In this case, the voice data has priority over the normal data. US-A-5,654,969 discloses the option of designing a transmission cycle such that it is possible to distinguish between two data types, one data type having transmission priority. EP-A-1 111 846 describes a real-time system in which real-time data is transmitted first in a transmission cycle, and then other data is transmitted.

Please replace the third paragraph on page 3 with the following amended paragraph:

This problem is solved by a method ~~according to Claim 1, an interface unit according to claim 8 and a node according to Claim 13~~ according to the recited claims. Preferred refinements are specified in the dependent claims.

Please replace the last paragraph on page 3 and extending to page 4 with the following amended paragraph:

The data transmission method according to the invention for a local area network permits parallel usage of the communications network for real-time and non-real-time applications. In particular, it is assured that the protocols according to the invention for local area networks, ~~the data link layer in the OSI model represents [sic]~~, which represent the data link layer in the OSI model, also satisfy the requirements of real-time capability and reaction time for machine control tasks. In order to meet the communications requirements of a real-time system, data transmission is done under complete control of the real-time system, with real-time data communication being prioritized over the remaining data communication, e.g., for error diagnosis, which is initiated by the operating system of the node. All data for non-real-time applications is treated on principle as being lower-priority and is transmitted only when data transmission for real-time data packets has already terminated. With the aid of the prioritization technique of the invention for real-time data with simultaneous performance of a cyclical and deterministic data transmission, it is assured that non-real-time capable accesses are executed only after real-time capable accesses and thus do not obstruct real-time data traffic.